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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,221	09/22/1999	GORKEM I. ATES	ATEG21A	4402

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EXAMINER
NGUYEN, HAI V

ART UNIT	PAPER NUMBER
2142	15

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/401,221	ATES, GORKEM I.	
	Examiner	Art Unit	
	Hai V. Nguyen	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This Action is in response to the communication received on 03 July 2003.

2. Claims 1-6 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Brendel** et al. patent no. **5,774,660** in view of **Leighton** et al. patent no. **6,108,703.**

5. As to claim 4, Brendel discloses a method for using an Internet system, comprising the steps of:

a) making a request for information, over the Internet, by a client, to the a main server *(Fig. 8, server 56)* of the Internet system and not to the said at least one participant server *(Fig. 8, server 51, 52) (Brendel, the load balancer waits for a URL request from the client once the load balancer has made the connection with the client, (col. 6, lines 65-67))*;

b) examining an IP address of the client, by said main server (the load balancer receives the URL request from the client and decodes the URL request to determine the requested resource, *(Brendel, col. 6, line 63 – col. 7, line 30))*;

c) seeking at least one participant server of the Internet system, by said main server, so as to form an at least one nearest participant server *(Brendel, the assigned node is selected based on a location of the requested resource determined from the URL request, (Brendel, col. 6, line 63 – col. 7, line 30))*;

d) requesting over the Internet, by said main server acting like an orchestra leader, that said at least one nearest participant server sent the requested information (the resource) to the client, packet-to-packet, over the Internet *(Brendel, the load balancer chooses an assigned node based on the resources contained by each network nodes. The assigned node reads the requested resource and transmits it to the client, (Brendel, col. 6, line 20 – col. 7, line 30));*

e) determining if said at least one nearest participant server has the requested information *(Brendel, the load balancer determines an assigned server in plurality of network nodes to respond to a request from the client contained in an incoming data packet, (Brendel, col. 6, line 20 – col. 7, line 30));*

f) labeling, by said at least one nearest participant server, each packet with an IP address of said main server, which enables the client which has a port only for main server addresses to accept said packets, if answer to step e) is YES *(Brendel, the packets received from the client are TCP/IP packets having a destination IP address which is a virtual IP address of the load balancer, (Brendel, col. 6, line 20 – col. 7, line*

30); and Brendel also discloses that the balancer network node is in the plurality of network nodes containing web servers. The web site is addressable by one network address for all web servers in plurality of network nodes containing web servers, (Brendel, col. 6, lines 20-52));

g) sending the requested information with said IP address of said main server, by said at least one nearest participant server, to the client, over the Internet *(Brendel, col. 6, line 63 – col. 7, line 30)*; However, Brendel does not teach explicitly downloading the requested information from said main server to said at least one nearest participant server, which will distribute the load of sad main server to said at least one participant server when lacking multicasting so as to save costs, by virtual of said at least one participant server being relatively easy and inexpensive to add as compared to clustering more servers to said mains server, if answer to STEP e) is NO. Thus, the artisan would have been motivated to look to the related networking art for potential system for implementing the downloading the requested information from said main server to said at least one nearest participant server, which will distribute the load of said main server to said at least one participant server when lacking multicasting so as to save costs, by virtual of said at least one participant server being relatively easy and inexpensive to add as compared to clustering more servers to said mains server, if answer to STEP e) is NO.

In the same field of endeavor, Leighton, related Global Hosting System, discloses in an analogous art (e.g., content distribution), *Leighton discloses that the inventive framework allows a Content Provider to replicate its most popular content at*

an unlimited number of points throughout the world. The actual content that is replicated at any one geographic location is specifically tailored to viewers in that location. Content is automatically sent to the location where it is requested, without any effort or overhead on the part of a Content Provider. A base HTML document portion of a Web page is served from the Content Provider's site while one or more embedded objects for the page are served from the hosting servers, preferably, those hosting servers nearest the client machine (col. 2, line 25 – col. 4, line 22). Leighton also discloses that global hosting according to the present invention also allows an ISP to control how and where content transverses its network. Global hosting servers can be set up at the edges of the ISP's network (at the many network exchange and access points, for example). This enables the ISP to serve content for sites that it hosts directly into the network exchange points and access points. Expensive backbone links no longer have to carry redundant traffic from the content provider's site to the network exchange and access points. Instead, the content is served directly out of the ISP's network, freeing valuable network resources for other traffic (Leighton, col. 13, lines 35-61).

Accordingly, it would have been obvious to one of ordinary skill in the Data networking art at the time of the invention was made to have incorporated the teachings of Brendel with Leighton's teachings, for the purpose of *allowing the hosting scheme to be far more efficient than schemes that cache everything everywhere, or that cache objects only in pre-specified locations (Leighton, col. 3, lines 42-57) and unlimited cost effective scalability (Leighton, col. 14, line 62 – col. 15, line 13). Leighton also suggests that content is automatically replicated to the global server network in an intelligent and*

efficient fashion. Content is replicated in only those locations where it is needed (Leighton, col. 14, lines 25-49). Leighton also suggests that improving the Web site performance and avoiding the expensive backbone links to carry redundant traffic from the Content Provider's Web site to the network exchange and access points (Leighton, col. 13, line 62 – col. 14, line 49).

i) returning to step f).

6. As to claim 5, Brendel-Leighton discloses wherein said step of making a request for information, over the Internet, by the client, from the main server includes making the request for at least one of a streaming video and audio, over the Internet, by the client, from the main server *(Brendel, col. 8, lines 63-67; col. 9, lines 1-16))*.

7. As to claim 6, Brendel-Leighton discloses wherein said step of seeking the nearest at lest one participant server, by said main server, so as to form an at least one nearest participant server includes seeking the nearest at least one nearest participant server, by said main server, so as to form said at least one nearest participant server that has the most bandwidth and CPU and other serving requirements needed to furnish the requested information to the client *(Brendel, Fig. 7, the load balancer 54 keeps track of which requests are being processed by each server in server farm 50, and attempts to balance the load of requests among the servers, col. 9, lines 30-32); Fig. 8, the load balancer 70 determines that only server 52 and not servers 56, 51 can handle the request, col. 10, lines 54-59). Leighton also discloses in Fig. 3 that when the HTML request fir the page is received, the based HTML document is served by the Web site and some portion of the page's embedded objects are served from the hosting servers*

near (although not necessarily the closest) to the client machine that initiates the request (Leighton, col. 3, lines 66 – col. 4, line 22).

8. As to claim 1, Brendel-Leighton discloses an Internet system, comprising:

a main server *(Brendel, Fig. 7; server 54; Figs. 8, 19, server 56; Leighton, Fig. 3, item 44, network access point)* for storing information to be requested over the Internet *(Brendel, Figs. 8, 19, Internet cloud 66)* by a client *(Brendel, Figs. 8, 19, Client browser 10; Leighton, Figs. 1, 3, client 10)* so as to form a request for information and having an IP address *(Brendel, Figs. 7, 8, IP=230.101.17.200)*; and

at least one participant server having an IP address *(Brendel, Fig. 7, server 52 having IP= 230.101.17.102; Figs. 8, 19, server 52 having IP = 230.101.17.102)* and electrically communicating with said main server; said at least one participant server not receiving the request for information from the client, but rather said main server receiving the request for information over the Internet from the client and requesting over the Internet that said at least one participant sever send the requested information over the Internet back to the client *(the load balancer determines an assigned server in the plurality of network nodes to respond to the request from the client contained in an incoming data packet. The load balancer transfers a connection to the client to the assigned server. The assigned node reads the requested resource and transmits the requested resource to the client (col. 6, line 20-col. 7, line 30); the assigned servers can also be located remotely from the load balancer, such as over a WAN using this technique (Brendel, col. 9, lines 52-64; col. 10, lines 28-52; col. 11, lines 64-67; col. 12, lines 1-5; col. 17, lines 5-8; col. 20, lines 35-63); and servers in the web*

farm may be geographically remote, where some of the servers are located in one city while other servers are located in other cities. Load balancing may be performed not just based on content, but also geographically to minimize traffic on the network backbone (Brendel, col. 20, lines 35-47)), and if said at least one participant server does not have the requested information, the requested information is downloaded from said main server to said at least one participant server *(Leighton, Leighton discloses that the inventive framework allows a Content Provider to replicate its most popular content at an unlimited number of points throughout the world. The actual content that is replicated at any one geographic location is specifically tailored to viewers in that location. Content is automatically sent to the location where it is requested, without any effort or overhead on the part of a Content Provider. A base HTML document portion of a Web page is served from the Content Provider's site while one or more embedded objects for the page are served from the hosting servers, preferably, those hosting servers nearest the client machine (Leighton, col. 2, line 25 – col. 4, line 22). Leighton also discloses that global hosting according to the present invention also allows an ISP to control how and where content transverses its network. Global hosting servers can be set up at the edges if the ISP's network (at the many network exchange and access points, for example). This enables the ISP to server content for sites that it hosts directly into the network exchange points and access points. Expensive backbone links no longer have to carry redundant traffic from the content provider's site to the network exchange and access points. Instead, the content is served directly out of the ISP's network, freeing valuable network resources for other traffic (Leighton, col. 13, lines 35-61)*, and when

said at least one participant server sends the requested information over the Internet back to the client, said at least one participant server assigns to the requested information said IP address of said main server and not said IP address of said at least one participant server *(Brendel, the packets received from the client are TCP/IP packets having a destination IP address which is a virtual IP address of the load balancer, (Brendel, col. 6, line 20 – col. 7, line 30); and Brendel also discloses that the balancer network node is in the plurality of network nodes containing web servers. The web site is addressable by one network address for all web servers in plurality of network nodes containing web servers, (Brendel, col. 6, lines 20-52))*.

9. As to claim 2, Brendel-Leighton discloses, wherein said main server is a TCP/IP server and assigns jobs to said at least one participant server dynamically without relocating the client using neither HTTP nor HTML commands so as to take relocating process away from top networking OSI layers to 3rd level of Internet working OSI that is IP so as to enable starting downloading of the requested information from one of said at least one participant servers and finishing the downloading from another of said at least one participant server without ever noticing server alternation by virtue of said at least one participant server assigning to the requested information said IP address of said main server and not said IP address of said at least one participant server *(Brendel, col. 6, line 20 - col. 7, line 30; col. 9, line 17 – col. 10, line 52)*.

10. As to claim 3, Brendel-Leighton discloses, wherein said top networking OSI is at least one of TCP, HTTP, and application level *(Brendel, Figs. 12, 13, 17)*.

Response to Arguments

11. Applicant's arguments filed on 03 July 2003 have been fully considered but they are not persuasive.

12. In the remarks, Applicant argued in substance that

(A) Prior art does not teach "...said main server... requesting ***over the Internet*** that said at least one participant server send the requested information over the Internet back to the client..." in claims 1.

As to the point (A), Brendel discloses that the load balancer then transfers the connection and the current TCP state to the assigned server, using TCP migration120. TCP state migration is not simply forwarding packets through as they are received. In stead the packets received are stored by the load balancer and then played back to the assigned server. The assigned server accesses its local disk to read the requested file and sends a copy of the requested file to the browser through the Internet as data transfer 104 (Brendel, col. 9, lines 52-64; col. 10, lines 38-52; col. 11, lines 64-67; col. 12, lines 1-5; col. 20, lines 35-63). Brendel also discloses that *the load balancer determines an assigned server in the plurality of network nodes to respond to the request from the client contained in an incoming data packet. The load balancer transfers a connection to the client to the assigned server. The assigned node reads the requested resource and transmits the requested resource to the client (col. 6, line 20-col. 7, line 30*); ***the assigned servers can also be located remotely from the load balancer, such as over a WAN using this technique*** *(Brendel, col. 17, lines 5-8).*

It would have been obvious to one of ordinary skill in the networking art to conclude that ***over the Internet*** is equivalent to ***over Wide Area Network (WAN)***.

(B) Prior art does not teach, "...if said at least one participant server does not have the requested information, ***the requested information is downloaded from the main server to said at least one participant server***..." in claims 1.

As to point (B), Leighton discloses that ***the actual content that is replicated at any one geographic location is specifically tailored to viewers in that location.*** *Content is automatically sent to the location where it is requested, without any effort or overhead on the part of a Content Provider. A base HTML document portion of a Web page is served from* ***the Content Provider's site*** *while one or more embedded objects for the page are served from* ***the hosting servers****, preferably, those hosting servers nearest the client machine (Leighton, col. 2, line 25 – col. 4, line 22)*.

It would have been obvious to one of ordinary skill in the networking art to conclude that ***the requested information is downloaded from the main server to said at least one participant server*** is equivalent to ***the actual content that is replicated at any one geographic location is specifically tailored to viewers in that location***; and ***the main server*** is equivalent to ***the Content Provider's site***; and ***the participant server*** is equivalent to ***the hosting server***.

(C) Prior art does not teach "requesting ***over the Internet***, by said main server acting like an orchestra leader, that that said at least one participant server send the requested information over the Internet back to the client..." in claim 4.

As to point (C), Brendel discloses that the load balancer then transfers the connection and the current TCP state to the assigned server, using TCP migration 120. TCP state migration is not simply forwarding packets through as they are received. In stead the packets received are stored by the load balancer and then played back to the assigned server. The assigned server accesses its local disk to read the requested file and sends a copy of the requested file to the browser through the Internet as data transfer 104 (Brendel, col. 9, lines 52-64; col. 10, lines 38-52; col. 11, lines 64-67; col. 12, lines 1-5; col. 20, lines 35-63). Brendel also discloses that *the load balancer determines an assigned server in the plurality of network nodes to respond to the request from the client contained in an incoming data packet. The load balancer transfers a connection to the client to the assigned server. The assigned node reads the requested resource and transmits the requested resource to the client (col. 6, line 20-col. 7, line 30); the assigned servers can also be located remotely from the load balancer, such as* ***over a WAN*** *using this technique (Brendel, Fig 17; col. 17, lines 5-8).*

It would have been obvious to one of ordinary skill in the networking art to conclude that ***over the Internet*** is equivalent to ***over Wide Area Network***.

(D) Prior art does not teach, "downloading the requested information from said main server to said at least one nearest participant server, which will ***distribute the load of said main server to said at least one participant server when lacking multicasting so as to save costs, by virtual of said at least one participant server being relatively easy and inexpensive to add as compared to clustering more servers to said mains server*** in claim 4.

As to point (D), *Leighton discloses that global hosting according to the present invention also allows an ISP to control how and where content transverses its network. Global hosting servers can be set up at the edges of the ISP's network (at the many network exchange and access points, for example). This enables the ISP to serve content for sites that it hosts directly into the network exchange points and access points.* ***Expensive backbone links no longer have to carry redundant traffic from the content provider's site to the network exchange and access points****. Instead, the content is served directly out of the ISP's network, freeing valuable network resources for other traffic (Leighton, col. 13, lines 35-61).* Leighton also discloses that the aspect of the invention *allows the hosting scheme to be far more efficient than schemes that cache everything everywhere, or that cache objects only in pre-specified locations (Leighton, col. 3, lines 42-570); Leighton also discloses that* ***load balancing across the set of hosting servers*** *is achieved in part through a novel technique for distributing the embedded object requests (Leighton, col. 3, line 66 – col. 4, line 22) and* ***unlimited cost effective scalability*** *(Leighton, col. 14, line 62 – col. 15, line 13). Leighton also suggests that* ***content is automatically replicated to the global server***

network in an intelligent and efficient fashion. Content is replicated in only those locations where it is needed (Leighton, col. 14, lines 25-49). *Leighton also suggests that improving the Web site performance and* ***avoiding the expensive backbone links to carry redundant traffic from the Content Provider's Web site to the network exchange and access points*** *(Leighton, col. 13, line 62 – col. 14, line 49).*

It would have been obvious to one of ordinary skill in the networking art to conclude that ***distribute the load of said main server to said at least one participant server when lacking multicasting so as to save costs, by virtual of said at least one participant server being relatively easy and inexpensive to add as compared to clustering more servers to said mains server*** is equivalent to ***content is automatically replicated to the global server network in an intelligent and efficient fashion. Content is replicated in only those locations where it is needed*** *and* ***avoiding the expensive backbone links to carry redundant traffic from the Content Provider's Web site to the network exchange and access points***.

(E) There is an improper hindsight reasoning to combine in claim 1, 4.

As to point (E), in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

(F) There is a piecemeal analysis of references.

As to point (F), in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

(G) There is no suggestion to combine.

As to point (G), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) And *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, *the Examiner does NOT either use Appellant's disclosure to make up for the motivation or suggestion to combine the references or make up his own reasons for combination of references.* Accordingly it would have been obvious to one of ordinary skill in the Data networking art at the time of the invention was made to have incorporated the teachings of Brendel with Leighton's teachings, for the purpose of ***allowing the hosting scheme to be far more efficient than schemes that cache***

everything everywhere, or that cache objects only in pre-specified locations (Leighton, col. 3, lines 42-57) and unlimited cost effective scalability (Leighton, col. 14, line 62 – col. 15, line 13). Leighton also suggests that content is automatically replicated to the global server network in an intelligent and efficient fashion. Content is replicated in only those locations where it is needed (Leighton, col. 14, lines 25-49). Leighton also suggests that improving the Web site performance and avoiding the expensive backbone links to carry redundant traffic from the Content Provider's Web site to the network exchange and access points (Leighton, col. 13, line 62 – col. 14, line 49).

As a matter of fact, Brendel teaches the artisan that the load balancing may be performed not just based on content, but also geographically to minimize traffic on the backbone. The part of the web site in a city may be connected locally through one or more LAN's while being connected to other cities using a WAN (Brendel, col. 20, 35-47) and the assigned servers can also be located remotely from the load balancer, such as over WAN using this technique (Brendel, col. 17, lines 5-8) and invites the artisan to incorporate any available software and/or hardware for balancing the content distribution to users globally from Content Service Provider's main web server within the implementation. Leighton teaches the artisan that the Content Provider's main web server replicates (e.g., downloads) the actual content to the hosting servers in global network in only those locations where it is needed (Leighton, col. 14, lines 25-49) in order to balance the load across the set of hosting servers in the global network (Leighton, col. 3, line 66 – col. 4, line 22) and to provide unlimited cost effective

scalability (Leighton, col. 14, line 62 – col. 15, line 13) and to avoid the expensive backbone links (e.g., setting up more servers clustered with the Content Provider's main web server very costly) to carry redundant traffic from the Content Provider's Web site to the network exchange and access points (e.g., hosting server locations) (Leighton, col. 13, line 62 – col. 14, line 49).

Accordingly, it would have been obvious to one of ordinary artisan to provide for the modification of network design choice to balance the load across the set of participant hosting servers for distributing the requested information or data or resource or content over the Internet since Leighton shows the Figs. 3,5 equivalent to the claimed.

Prior Art Of Record

13. The prior art made of record and relied upon is considered pertinent to applicant's disclosure.

Bunney et al. (US 6,003,032), Ishikawa (US 6,038,602), Kobayakawa et al. (US 6,119, 078), Gupta (US 6,446,109 B2) are related prior art disclosing implementation of balancing load in network information systems.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 703-306-0276. The examiner can normally be reached on 7:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Powell can be reached on 703-305-9703. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800/4700.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20131

or faxed to:

(703) 746-7239, (for **formal communications**; please mark "EXPEDITE PROCEDURE").

or:

(703) 746-7240 (for **informal or draft communications**, please label "PROPOSED " or "DRAFT").

Or:

(703) 746-7238 (for After Final communications).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

KENNETH R. COULTER
PRIMARY EXAMINER

Hai V. Nguyen
Examiner
Art Unit 2142

HN